

Supplementary Table 1. Adjusted odds ratios of CRC associated with polyp type on the first colonoscopy in men

Polyp category	Cases, n (%) ^a	Controls, n (%) ^a	Unadjusted OR (95% CI)	Adjusted OR ^b (95% CI)	P value
No polyp	121 (36.6)	841 (50.8)	1.0 (Reference)	1.0 (Reference)	
SSL					
SSL alone	8 (2.4)	31 (1.9)	1.7 (0.8-3.8)	1.7 (0.8-3.8)	0.20
SSL + adenoma	13 (3.9)	30 (1.8)	3.0 (1.5-5.8)	2.9 (1.5-5.7)	0.002
HP					
HP alone	6 (1.8)	77 (4.7)	0.5 (0.2-1.2)	0.5 (0.2-1.2)	0.13
HP + adenoma	16 (4.8)	101 (6.1)	1.1 (0.6-1.9)	1.1 (0.6-1.9)	0.78
TSA					
TSA alone	0 (0.0)	2 (0.1)	0.0 (0.0-I)	0.0 (0.0-I)	0.98
TSA + adenoma	5 (1.5)	3 (0.2)	12.4 (2.9- 52.8)	12.2 (2.9- 51.9)	0.0007
Unspecific SP					
Unspecified SP alone	7 (2.1)	43 (2.6)	1.1 (0.5-2.6)	1.0 (0.5-2.4)	0.92
Unspecified SP + adenoma	11 (3.3)	36 (2.2)	2.1 (1.0-4.2)	2.1 (1.0-4.2)	0.04

Conventional adenoma alone	144 (43.5)	491 (29.7)	2.0 (1.5-2.6)	2.0 (1.6-2.7)	<0.00001
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^aPercentage was regarding the total number of cases or controls

^bAdjusted for age, sex and year of first colonoscopy (within 1 year)

Abbreviations: CRC, colorectal cancer; HP, hyperplastic polyp; SSL, sessile serrated lesion;

TSA, traditional serrated adenoma; SP, serrated polyp; OR, odds ratio

Supplementary Table 2. Adjusted odds ratios of CRC associated with polyp type on the first colonoscopy in women

Polyp category	Cases, n (%)^a	Controls, n (%)^a	Unadjusted OR (95% CI)	Adjusted OR^b (95% CI)	P value
No polyp	162 (44.5)	1180 (64.8)	1.0 (Reference)	1.0 (Reference)	
SSL					
SSL alone	17 (4.7)	29 (1.6)	4.2 (2.3-7.9)	4.4 (2.3-8.2)	<0.00001
SSL + adenoma	15 (4.1)	16 (0.9)	6.8 (3.3-13.9)	7.1 (3.4-14.7)	<0.00001
HP					

HP alone	12 (3.3)	84 (4.6)	1.0 (0.6-2.0)	1.1 (0.6-2.0)	0.87
HP + adenoma	15 (4.1)	53 (2.9)	2.2 (1.2-4.0)	2.0 (1.1-3.7)	0.03
TSA					
TSA alone	0 (0.0)	2 (0.1)	0.0 (0.0-I)	0.0 (0.0-I)	0.98
TSA + adenoma	1 (0.3)	2 (0.1)	4.0 (0.4-45.3)	3.9 (0.3-43.3)	0.27
Unspecific SP					
Unspecified SP alone	15 (4.1)	40 (2.2)	2.8 (1.5-5.2)	2.8 (1.5-5.2)	0.001
Unspecified SP + adenoma	12 (3.3)	28 (1.5)	3.4 (1.7-6.9)	3.3 (1.6-6.7)	0.001
Conventional adenoma alone	115 (31.6)	386 (21.2)	2.2 (1.7- 2.9)	2.2 (1.7-2.9)	<0.00001

^aPercentage was regarding the total number of cases or controls

Abbreviations: CRC, colorectal cancer; HP, hyperplastic polyp; SSL, sessile serrated lesion;

TSA, traditional serrated adenoma; SP, serrated polyp; OR, odds ratio

Supplementary Table 3. Adjusted odds ratios of CRC associated with SSLs and HPs by location and size in comparison to individuals with no polyp^a

Polyp category	Cases, n (%)	Controls, n (%)	Unadjusted OR (95% CI)	Adjusted OR (95% CI) ^b	P value
No polyp	283 (43.5)	2021 (60.7)	(Reference)	(Reference)	
SSL					

Proximal, large	10 (1.5)	8 (0.2)	12.6 (3.5-46.2)	12.8 (3.5-46.9)	0.0001
Proximal, small	8 (1.2)	22 (0.7)	1.8 (0.7-4.5)	1.9 (0.8-4.7)	0.18
Distal, large	1 (0.2)	0 (0)	-	-	0.98
Distal, small	3 (0.5)	21 (0.6)	0.8 (0.2-3.1)	0.8 (0.2-3.0)	0.77
HP					
Proximal, large	0	0	-	-	-
Proximal, small	1 (0.1)	17 (0.5)	0.4 (0.0-3.5)	0.5 (0.1-3.9)	0.47
Distal, large	0	5 (0.1)	0.0 (0.0-I)	0.0 (0.0-I)	0.98
Distal, small	12 (1.7)	119 (3.4)	0.8 (0.4-1.5)	0.8 (0.4-1.5)	0.49
Unspecified SP					
Proximal, large	1 (0.1)	1 (0.03)	-	-	0.99
Proximal, small	10 (1.4)	18 (0.5)	4.3 (1.6-11.5)	4.2 (1.6-11.4)	0.005
Distal, large	0	0	-	-	-
Distal, small	7 (1.0)	48 (1.4)	0.9 (0.4-2.2)	0.9 (0.4-2.2)	0.84

^a Polyps with unknown size are not listed

^b Adjusted for age, sex and year of first colonoscopy (within 1 year)

Abbreviations: CRC, colorectal cancer; HP, hyperplastic polyp; SSL, sessile serrated lesion; TSA, traditional serrated adenoma; SP, serrated polyp; OR; odds ratio; I, indefinite.

Supplementary Table 4. Adjusted odds ratios of CRC stratified by age groups

Polyp category	Cases, n (%)	Controls, n (%)	Unadjusted OR (95% CI)	Adjusted OR (95% CI) ^a	P value
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Age 50-69 years					
No polyp	160 (39.2)	1186 (58.6)	1.0 (Reference)	1.0 (Reference)	.
SSL					
SSL alone	12 (2.9)	36 (1.8)	2.4 (1.2- 4.7)	2.4 (1.2- 4.8)	0.012
SSL + adenoma	14 (3.4)	25 (1.2)	4.3 (2.2- 8.4)	4.4 (2.2- 8.6)	0.00002
HP					
HP alone	11 (2.7)	110 (5.4)	0.8 (0.4- 1.4)	0.8 (0.4- 1.5)	0.41
HP + adenoma	18 (4.4)	91 (4.5)	1.6 (0.9- 2.7)	1.5 (0.9- 2.6)	0.15
TSA + adenoma	3 (0.7)	4 (0.2)	6.0 (1.3-27.4)	6.1 (1.4-27.8)	0.02
Unspecified SP					
Unspecified SP alone	16 (3.9)	51 (2.5)	2.4 (1.3- 4.3)	2.4 (1.3- 4.3)	0.005
Unspecified SP + adenoma	13 (3.2)	31 (1.5)	3.2 (1.6- 6.2)	3.1 (1.6- 6.0)	0.001
Conventional adenoma alone	161 (39.5)	491 (24.2)	2.5 (1.9- 3.2)	2.5 (1.9- 3.2)	<0.0001
Age 70 years or older					
No polyp	123 (42.9)	835 (57.6)	1.0 (Reference)	1.0 (Reference)	.
SSL					
SSL alone	13 (4.5)	24 (1.7)	3.4 (1.7- 6.9)	3.4 (1.7- 6.9)	0.0006
SSL + adenoma	14 (4.9)	21 (1.4)	4.4 (2.2- 8.8)	4.3 (2.1- 8.8)	0.00005
HP					
HP alone	7 (2.4)	51 (3.5)	0.9 (0.4- 2.0)	0.9 (0.4- 2.1)	0.83
HP + adenoma	13 (4.5)	63 (4.3)	1.4 (0.7- 2.7)	1.4 (0.7- 2.7)	0.31
TSA					
TSA alone		4 (0.3)	0.0 (0.0- I)	0.0 (0.0- I)	0.98
TSA + adenoma	3 (1.0)	1 (0.1)	22.4 (2.3- 218)	22.1 (2.3- 216)	0.008
Unspecified SP					
Unspecified SP alone	6 (2.1)	32 (2.2)	1.2 (0.5- 3.0)	1.2 (0.5- 2.9)	0.71
Unspecified SP + adenoma	10 (3.5)	33 (2.3)	2.1 (1.0- 4.4)	2.2 (1.0- 4.6)	0.04
Conventional adenoma alone	98 (34.1)	386 (26.6)	1.7 (1.3- 2.3)	1.7 (1.3- 2.4)	0.0003

^b Adjusted for age, sex and year of first colonoscopy (within 1 year)

^a Adjusted for age, sex and year of first colonoscopy (within 1 year)

Abbreviations: CRC, colorectal cancer; HP, hyperplastic polyp; SSL, sessile serrated lesion;

TSA, traditional serrated adenoma; SP, serrated polyp; OR; odds ratio; I, indefinite

Supplementary Table 5. Adjusted odds ratios of CRC associated with SSLs in the proximal vs. distal colon compared to individuals with no polyp^a

Polyp category	Cases, n (%)	Controls, n (%)	Unadjusted OR (95% CI)	Adjusted OR (95% CI) ^b	P value
SSL by location					
No polyp (Reference)	283 (84.2)	2021 (95.0)	1.0 (Reference)	1.0 (Reference)	
Proximal SSL alone	18 (5.4)	30 (1.4)	3.4 (1.7-6.8)	3.5 (1.8-6.9)	0.0003
Proximal SSL + adenoma	17 (5.1)	19 (0.9)	8.5 (3.3-22.1)	8.4 (3.2-21.7)	<.0001
Distal SSL alone	4 (1.2)	20 (0.9)	1.3 (0.4- 4.3)	1.3 (0.4-4.1)	0.70
Distal SSL + adenoma	2 (0.6)	11 (0.5)	1.1 (0.2-5.5)	1.1 (0.2-5.8)	0.89
Proximal and distal SSL alone	3 (0.9)	9 (0.4)	1.7 (0.4-7.1)	1.8 (0.4-7.6)	0.45
Proximal and distal SSL + adenoma	9 (2.7)	16 (0.8)	10.2 (2.7- 37.8)	10.4 (2.8- 38.8)	0.0005

^a Proximal is defined as any location proximal to the rectum; distal is defined as rectum only.

^b Adjusted for age, sex and year of first colonoscopy (within 1 year)

Abbreviations: CRC, colorectal cancer; HP, hyperplastic polyp; SSL, sessile serrated lesion;

TSA, traditional serrated adenoma; SP, serrated polyp; OR; odds ratio; I, indefinite

Supplementary Table 6. Adjusted odds ratios of CRC associated with the total number of SSLs and conventional adenomas

Polyp category	Cases, n (%)	Controls, n (%)	Unadjusted OR (95% CI)	Adjusted OR (95% CI) ^a	P value
No polyp (Reference)	283 (40.7)	2021 (58.2)	1.0 (Reference)	1.0 (Reference)	
Total number of SSL and adenoma					
1	19 (5.7)	41 (1.9)	2.8 (1.5-5.2)	2.8 (1.5-5.3)	0.001
2	9 (2.7)	33 (1.6)	1.8 (0.7-4.3)	1.8 (0.8-4.5)	0.18
3	10 (3.0)	11 (0.5)	6.1 (2.2- 17.2)	6.1 (2.1- 17.3)	0.0007
4+	15 (4.5)	21 (1.0)	9.9 (3.5- 27.6)	9.9 (3.5- 27.8)	<.0001

^a Adjusted for age, sex and year of first colonoscopy (within 1 year)

Abbreviations: CRC, colorectal cancer; SSL, sessile serrated lesion; OR, odds ratio

Supplementary Table 7. Adjusted odds ratios of CRC associated with SSLs and synchronous nonadvanced vs. advanced adenomas

Polyp category	Cases, n (%)	Controls, n (%)	Unadjusted OR (95% CI)	Adjusted OR (95% CI) ^a	P value
No polyp	283 (84.0)	2021 (94.7)	1.0 (Reference)	1.0 (Reference)	

SSL					
SSL alone	25 (7.4)	60 (2.8)	2.5 (1.4-4.3)	2.5 (1.5-4.4)	0.001
SSL + non-advanced adenoma	12 (3.6)	32 (1.5)	3.7 (1.6-8.7)	3.6 (1.5-8.6)	0.003
SSL + advanced adenoma	16 (4.8)	14 (0.7)	11.1 (4.0-30.6)	11.6 (4.2-32.3)	<.0001

^a Adjusted for age, sex and year of first colonoscopy (within 1 year)

Abbreviations: CRC, colorectal cancer; SSL, sessile serrated lesion; OR; odds ratio